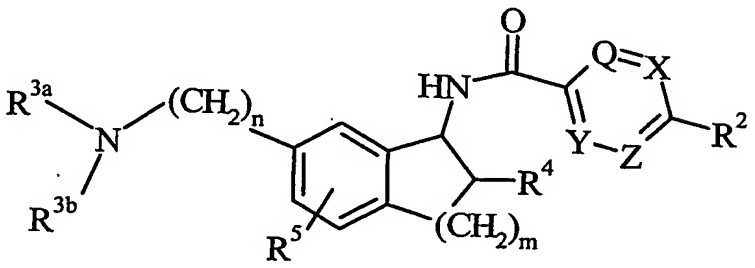
WHAT IS CLAIMED IS:

1. A compound of the formula



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wherein

Q, X, Y, and Z are independently selected from the group consisting of CR^1 and N, provided that no more than two of Q, X, Y, and Z are N and at least two of Q, X, Y, and Z are CH; or Y is CH, Z is CH, and the moiety "Q=X" represents "S" to form a thiophene ring;

R^1 is independently at each occurrence selected from the group consisting of hydrogen, halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl;

R^2 is selected from the group consisting of halogen; C_1-C_4 alkoxy; C_1-C_4 alkyl; C_3-C_8 cycloalkyl; cyano; trifluoromethyl; pyridinyl optionally substituted with one to two substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl; thienyl optionally substituted with one substituent selected from the group consisting of halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl; phenyl optionally substituted with from one to three substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, C_1-C_4 alkyl, trifluoromethyl, and cyano; and pyrrolyl optionally substituted with one to two substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl;

R^{3a} is a radical of the formula

$$(Z')\text{-}(Y')_q\text{-}(')_p\text{-}$$

wherein:

X' is selected from the group consisting of C_1-C_4 alkandiyl and  ;

Y' is selected from the group consisting of O and S; and

Z' is selected from the group consisting of C_1-C_4 alkyl; C_3-C_8 cycloalkyl optionally substituted with one to three substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, C_1-C_4 alkyl, trifluoromethyl, cyano, and nitro; phenyl optionally substituted with one to three substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, C_1-C_4 alkyl, trifluoromethyl, cyano, and nitro; heteroaryl optionally substituted with one or two substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl; and heterocycle optionally substituted with one or two substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl;

p is zero or one;

q is zero or one;

provided that when p is zero, q is zero;

R^{3b} is selected from the group consisting of hydrogen, C_1-C_4 alkyl, and benzyl;

or R^{3a} and R^{3b} are taken together with the nitrogen with which they are attached to form a heterocycle optionally substituted with one or two substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl;

R^4 is selected from the group consisting of hydrogen, hydroxy, and fluoro;

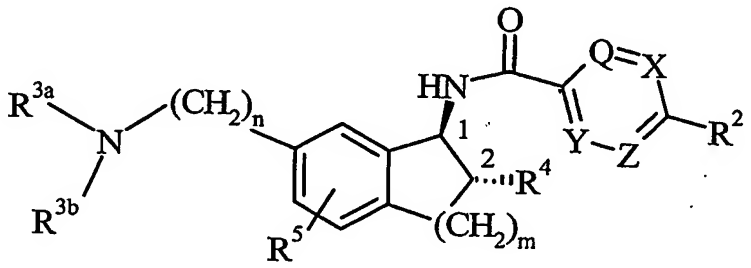
R^5 is selected from the group consisting of hydrogen, halogen, C_1-C_4 alkoxy, and C_1-C_4 alkyl;

m is one or two;

n is one or two;

or pharmaceutically acceptable addition salts thereof.

2. The compound of Claim 1 wherein R^5 is hydrogen, R^4 is hydroxy, m is one, and which has the trans stereochemistry at the 1- and 2-position shown below:



3. A compound according to any one of Claims 1-2 wherein Q, X, Y, and Z are each CH.

4. A compound according to any one of Claims 1-2 wherein one of Q, X, Y, and Z is CF and the others are CH.

5. A compound according to Claim 4 wherein Q is CF, and X, Y, and Z are each CH.

6. A compound according to any one of Claims 1-5 wherein R^2 is phenyl optionally substitituted with from one to three substituents independently selected from the group consisting of halogen, C_1-C_4 alkoxy, C_1-C_4 alkyl, trifluoromethyl, and cyano.

7. A compound according to Claim 6 wherein R^2 is phenyl.

8. A compound according to Claim 7 wherein n is one.

9. A pharmaceutical composition comprising a compound of Claim 1 and a pharmaceutically acceptable diluent.

10. A method of treating disorders associated with the muscarinic receptors, comprising: administering to a patient in need thereof an effective amount of a compound of Claim 1.

11. A method of treating cognitive disorders, comprising: administering to a patient in need thereof an effective amount of a compound of Claim 1.

12. A method of treating Alzheimer's disease, comprising: administering to a patient in need thereof an effective amount of a compound of Claim 1.

13. A method of treating schizophrenia, comprising: administering to a patient in need thereof an effective amount of a compound of Claim 1.

14. A method of treating mild cognitive impairment, comprising: administering to a patient in need thereof an effective amount of a compound of Claim 1.

15. A method of treating cognitive impairment associated with schizophrenia, comprising: administering to a patient in need thereof an effective amount of a compound of Claim 1.